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AUTHOR Williams, Tannis MacBeth; And Others
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ABSTRACT

Content analyses of the depiction of aggression and images of reality on Canadian television were performed on 10% program tapes of top-rated Toronto programs. Content was coded in terms of global messages communicated, character portrayals, context and setting of the program, amount and nature of conflict portrayed, and detailed information on incidents of aggression. Aggression was defined as any behavior that could inflict either physical or psychological harm, and included explicit and implicit threats, nonverbal behaviors, and verbal abuse. Results were as follows: there were 18.5 acts of aggression per program hour; situation comedies led in nonphysical aggression, which, portrayed as funny, excessively distorted patterns of human interaction; aggression was incidental to plot; physical consequences of aggression were seldom shown; aggression, violence, and certain methods of conflict resolution were portrayed almost exclusively and milder forms of conflict and more constructive methods of resolution were rarely seen; characters were most often male, white collar, socially isolated, white, English-speaking North Americans; and police officers were commonly depicted engaging in violent behavior. In comparison to United States findings, Canadian programing was less aggressive in general but slightly higher in verbal/psychological aggression. (DF)

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CONTENT ANALYSIS: TELEVISION

Tannis MacBeth Williams, Merle L. Zabrack and Lesley A. Joy

Department of Psychology

University of British Columbia

Vancouver, B.C.

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Tannis MacBeth Williams, Merle L. Zabrack and Lesley A. Joy

Department of Psychology

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"All television is educational television. The only question is, What is it teaching?" observed U.S. Federal Communications Commissioner Nicholas Johnson (Leibert, Neale, & Davidson, 1973, p. 170). Concern has been expressed in recent years by the scientific community and the public that the "education" received from television by the average North American, who watches it 3 to 4 hours a day, leaves much to be desired. The effects of televised violence on the aggressive behaviour of the viewers have been of particular interest; research evidence provides strong support for this concern. It is surprising that the content of television has been studied much less than its effects. Despite the obvious contribution content analyses would make to research on the effects of television there has been relatively little work linking content and effects, perhaps because of the expense. George Gerbner and his associates at the Annenberg School of Communications have done most of the work in this area. They have published a violence profile for the three major U.S. networks annually over the past decade, and more recently have conducted several studies linking television content to viewers' perceptions of reality (e.g., Gerbner & Gross, 1974; Gerbner, Gross, Eleey, Jackson-Beeck, Jeffries-Fox, & Signorielli, 1977; Gerbner, Gross, Jackson-Beeck, Jeffries-Fox, & Signorielli, 1978). However, their work also has some limitations, especially from the point of view of Canadians. Only dramatic fiction shown either in 'prime time' or on Saturday morning has been analyzed. There is relatively little information available

regarding the content of programs other than dramatic fiction and/or shown at other times. Gerbner's analyses have been restricted to ABC, CBS, and NBC, and very little data are available from other sources regarding the content of Canadian television programming. And perhaps most importantly, the definition of violence, "the overt expression of physical force against others or the self, or the compelling action against one's will on pain of being hurt or killed" (Gerbner, 1972, p. 31) has been restricted to physical aggression. As Stein and Friedrich (1975) pointed out, "Virtually all of the research on television content and behavior limits the definition of violence to physical injury or damage. The verbal abuse, aggressive humor and control over other people by threat or imperative that are so prevalent on television are not included in most investigations" (Page 190). The research described in this paper was designed to address some of these gaps in the content analysis literature.

A prominent thesis underlying this content analysis was that a major aspect of the education received by television viewers has to do with the 'world view', values, and images of reality portrayed on television. It is Gerbner's (1972, 1973) contention that television drama provides a symbolic representation of life, particularly with regard to power relationships. If there is a tendency on the part of both viewers and the industry to think of television as a harmless form of entertainment rather than an educational medium (Stein & Friedrich, 1975), there is also a tendency to think that television is meant to portray fiction rather than reality. Whatever the intention, there is considerable evidence that viewers perceive it as portraying reality. Children and adolescents frequently describe television drama as accurately portraying reality (Greenberg & Dervin, 1970; McLeod, Atkin, & Chaffee, 1972a, 1972b; Lyle & Hoffman, 1972). Television affects children's attitudes and information about the world, especially when other

sources of information are not available (Beuf, 1974; DeFleur & DeFleur, 1967; Dominick & Greenberg, 1972; Scherer, 1970; Siegel, 1958). Gerbner and Gross (1974) have found that adults who are heavy viewers of television overestimate the probability of encountering violence in their community by comparison with light viewers, and by comparison with the reality, i.e., actual crime data. The issue of the accuracy of the reality portrayed on television has an added dimension for Canadians, for whom the televised view of the world originates more often from another culture than from our own. This same problem also occurs in many developing countries, where much of the content of television is either imported directly from the United States or produced locally by Americans.

The coding system developed for this research project was guided by a broad definition of aggression and an emphasis on describing the values and images of reality portrayed on television. For example, whenever conflict (aggressive or not) was portrayed, the coder noted the method for resolving conflict by choosing among: arbitration, conciliation, deflection, constructive resolution, compliance to an equal, compliance to an authority, coercion and suspension of conflict. This was done even though previous research (and anecdotal viewing) indicate that aggression is almost exclusively portrayed as the solution to conflict (Goranson, 1970). Aggression was defined as any behaviour that could inflict harm on an individual or individuals, either physically or psychologically and, therefore, included explicit and implicit threats to harm, nonverbal behaviours, verbal abuse, etc. Violence was defined as severe instances of physical aggression; specifically, behaviours that do, or potentially could, cause injury or death.

METHOD

A sample of 109 entertainment television program tapes was selected on the

basis of audience viewing figures for the Toronto area. The Canadian Bureau of Broadcast Measurement (BBM) data for January 1976 were used to select the top 100 programs, excluding news, sports and public affairs[1]; for each of the adult (age 19 and over), teenage (age 12-18) and child (up to age 11) viewing populations. A few regular programs produced in Canada but not shown because of pre-emptions during the period for which BBM figures were obtained, were added to the list (e.g., the crime show "Sidestreet"). This list formed the basis of the schedule for videotaping over the two-week period, May 17-30, 1976. Although usually only one videotape of each program was obtained, some of the programs with the highest audience figures were taped twice; that is, more than one show in the program series was obtained. The complete list of programs used in the analyses appears in Table 1. For most of the analyses the programs were grouped into the categories shown in Table 1, based on TV Guide descriptions.

In general, the coding format supplied information about the following: general or 'global' messages communicated; character portrayals (both for groups, e,g. teenagers, and for individual characters); context and setting of the program; the amount and nature of conflict portrayed; and detailed information on incidents of aggression. Aggression was considered to be a severe form of conflict. In particular, no conflict, argument, conflict and aggression were coded as a continuum; if aggression occurred (as defined earlier), the program segment was coded as aggresive, and this superseded argument. Thus a program segment would be coded as "argument" only if it did not contain more severe forms of conflict.

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[1]News, sports and public affairs, programs were content analyzed by other researchers for the Ontario Royal Commission on Violence in The Communications Industry.

A total of six people served as coders, but the majority of the work was done by three coders (two women and a man). Extensive training preceded the data collection. Most programs in the sample were content analyzed once. For reliability purposes, a subsample of sixteen programs (15%) was coded twice. Coders were unaware as to which programs had been selected for reliability checks. Reliability was calculated for each of the 284 items in the coding format either by using the formula and computer program developed by Krippendorff (1973), or by calculating the number of agreements divided by number of agreements plus disagreements. The mean reliability across all items in the coding system was .74; it was higher for the subsample of items discussed in this paper.

RESULTS and DISCUSSION

The coding system provided information about several aspects of the content of entertainment television, but only results concerned with the depiction of aggression and violence will be discussed in this paper. The unit of analysis was in most cases the program category (see Table 1). Within program categories the unit of analysis was the program "segment". Individual programs were arbitrarily divided into segments for the purposes of coding, with the segments demarcated according to the arrival and departure of characters, scene changes, etc. Finally, each incident of aggression (e.g., a kick or threat) was coded separately.

Aggression. Gerbner (1972) has reported that prime-time television drama contains an average of eight acts of physical violence per program hour. The 1501 incidents of all types of aggression in our sample of 81 hours of programming constitute an average of 18.5 aggressive incidents per program hour (excluding commercials, the actual mean length of the hour-long programs was 46.7 minutes). Of these 1501 aggressive incidents, 39.6% involved physical harm (e.g. battery, use of weapons), 27.2% involved potential

physical harm (e.g. direct and indirect verbal threats, chasing, brandishing a weapon, kidnapping), 24.8% involved psychological harm (e.g. verbal abuse, sarcasm, passive aggression), 0.9% involved socioeconomic or political harm (e.g. blackmail, threat to sue), and 7.5% involved wisecracks or symbolic aggression (e.g. 'the finger'). Thus, in our 1976 sample, there were 8 incidents of physical aggression per program hour, just as Gerbner reported in 1972. Our sample included a broader range of programs, not just dramatic fiction shown in prime time and Saturday morning programming, so one would intuitively expect a lower incidence of physical aggression than in Gerbner's sample. These results and Gerbner's own findings (Gerbner & Gross, 1974; Gerbner et al., 1977); indicate that the level of physical aggression in television increased through 1976. The overall rate of aggression fell in Gerbner's 1977 sample but with 16 incidents per hour (Gerbner et al., 1978) was still double that of our 1976 sample. In addition to physical aggression, our coders observed about 10 incidents per program hour involving verbal aggression, psychological aggression, or threat of physical aggression. These results indicate for the first time that the level of other kinds of aggression, such as verbal abuse and threat, may be even higher than the level of physical aggression portrayed on television.

The effect of including non-physical aggression in the content analysis can also be seen in the program category rankings for proportion of program segments containing aggressive interactions: situation comedy - 40%; animated - 27.8%; crime - 27.0%; music/variety/talk - 21.6%; adventure - 18.2%; documentary - 18.1%; non-animated children's - 12.2%; game - 10.2%; instruction-religion - 7.7%; and drama/medical - 6.9%. It is noteworthy that on the average, situation comedy programs contained more aggressive content than crime programs, but whereas the aggression depicted in crime shows was more often physical in nature, in situation comedies verbal abuse and threat

were more common. Indeed, situation comedies contained relatively little potential or actual physical aggression, but a great deal of verbal abuse and sarcasm, and this was usually depicted as funny. Certainly, sarcasm and meanness are part of life, and by the time most people have reached adulthood they have learned to take this form of aggression 'on the chin' and not show that it hurts. However, to portray so much verbal abuse and sarcasm, and to portray it as funny, is to excessively distort the reality of patterns of human interaction. Furthermore, there is some evidence from other research that this content may not be without its effects. Joy, Kimball and Zabrack (1977) observed the aggressive behaviour of elementary school children before and two years after the inception of television reception in their community. In addition to an increase in physical aggression, an increase in verbal aggression was obtained. The concern of other researchers (e.g. Stein & Friedrich, 1975) regarding the prevalence of verbal abuse on television seems clearly warranted.

Averaging across program categories, aggression was more often incidental (69%) than central to the plot. This finding mirrors the complaint of parents and other critics that much of televised aggression is gratuitous. In addition, aggression was almost always intentional (97.6%), as opposed to accidental, with the exception of 'harm to self' episodes, in which aggression was usually accidental or due to carelessness. Of course, as Gerbner and his colleagues argue, aggression in dramatic fiction is never truly accidental, since it is always intentionally written into the story (Gerbner et al., 1978).

The physical consequences of aggression were seldom shown; there was very little pain (3.1% of all aggressive acts) or blood (1.2%) depicted. A very unrealistic picture of the effects of aggression was presented. This has led some critics to argue that the effects of physical aggression should be emphasized on television, so people (and especially children) will realize

that in reality, there are severe consequences to the kinds of aggressive acts portrayed. These critics argue further that a more realistic portrayal of the consequences of such acts would cause considerable discomfort to the viewers and thus, aggression would be less likely to be considered exciting and desirable. However exposure to unpleasant events leads to desensitization (Cline, Croft, & Courrier, 1973; Drabman & Thomas, 1974). While seeing blood and pain would probably initially cause discomfort to the audience, viewers would quite possibly become accustomed to it. There is a real trade-off between discomfort and desensitization, and showing the physical consequences of aggression would not necessarily be more desirable than current practices. Since most (69%) of the aggression is incidental to the plot, a better alternative would be to simply delete the incidental aggression.

Aggression was typically depicted in very stereotyped ways. Witnesses were passive or encouraged the aggression and victims submitted or withdrew. Attacking directly was practically the only means used to achieve a goal. In essence, television seems to be teaching that aggression is a very effective means of gaining one's ends, with little suffering involved for either the aggressors or victims. The portrayal of aggression on television is sometimes justified with the argument that aggression and violence are part of life. That is so, of course, and few would argue that television content should not include aggression. What is disturbing is that it is portrayed almost exclusively, and other more positive aspects of human interaction receive so little attention.

Historically, conflict has been a central theme in dramatic fiction, and this is also sometimes used to justify the aggressive content of television programming. Two points seem relevant here. First, conflict exists in varying degrees, but our analyses revealed that on television, aggression and violence were substantially more common than milder forms of conflict, for

example, argument. Second, there are many ways of resolving conflict, but conflicts in our television sample were almost always resolved through compliance or suspension, and rarely through constructive resolution, conciliation, arbitration, etc. Again, our criticism is not that conflict is a central theme in entertainment television, but that aggression, violence, and certain methods of conflict resolution are portrayed almost exclusively, and milder forms of conflict and more constructive methods of conflict resolution are seen rarely.

Image of Reality. As stated earlier, we were interested in the images of reality portrayed by television, in part because of research evidence indicating that children and adults interpret their own environments in light of the world view portrayed by television, and in part because the televised view of the world portrayed to most Canadians originates in another culture, that of the U.S.A. A few of our relevant results are outlined here.

Averaging across all program categories, two-thirds (73.3%) of the 899 central characters were male, and the preponderance of males held true in all program categories including animated (75.6%) and non-animated (73.9%) children's programs. The highest proportion of female title or leading characters occurred in drama/medical programs (43%). There were very few children, adolescents or old people; the age range 19 to 64 included 80.1% of the male and 81.1% of the female characters. Even in non-animated children's shows only 6.8% of the characters were children. These findings replicate those obtained in several other studies.

Most characters were portrayed as social isolates, i.e., not portrayed as having any family or close friends and associates. Explicit or implicit evidence of the existence of family/friends was given most frequently in situation comedy (55.0%) and drama/medical (51.4%) programs, and more often for women (44.1%) than for men (27.9%). Very few characters were portrayed

clearly as blue collar workers (9.9% of all human characters) or poor (3.9%). Indeed, more were portrayed as upper class or elite (12.4%). White collar workers accounted for 25.2% of all human characters. Crime and music/variety/talk programs had particularly high proportions of people in the latter two categories (55.6% and 53.8% of all characters, respectively; if only characters for whom income level was codeable are considered, the proportions were 76% and 90%, respectively). In situation comedy and drama/medical programs the proportions of white and blue collar workers were about equal.

The vast majority of characters were white English-speaking North Americans. Only 1% of all characters portrayed in this sample were French Canadian. Indeed, Canadians viewing this sample of television would see French Canadians less often than they would see Black North Americans (6.9%), and the latter were under-represented by comparison with their proportion of the U.S. population.

Since the major focus of this content analysis was on aggression, the portrayal of law officers was of particular interest. Of the 899 characters coded, 90 or 10% were law officers. By comparison, less than 1% of Canada's population is employed in law enforcement. Interestingly, not all of these 90 law officers appeared in crime shows (75.6%); 6.8% appeared in children's non-animated programs, 4.6% in documentary shows, 3.3% in animated and 3.3% in instruction/religion shows, and one in each of adventure, game, music/variety/talk, and situation comedy programs. Almost all (93.3%) of the law officers were male.

It was common for law officers to commit violence (74.4% did so, whereas only 16.7% played an appropriate non-violent role). This violence was usually portrayed as justified (63%) and as only the level of violence necessary to accomplish the objective (68%). In reality, although most law officers

probably commit violence at some point in their careers. in Canada, such violence is markedly less common than one would assume from the behaviour of the law officers in our sample of television programs. For example, Vancouver is Canada's third largest city, with more than 60% of Canada's heroin addicts (as in the U.S.A., heroin is illegal in Canada). However, there were only four shots fired during all of 1976 by the entire Vancouver police force. Three of these shots were fired by one person on the same occasion, so there were only two incidents in which the police fired their guns (Hogarth, 1977). It seems unlikely that most Canadian television viewers would come close to accurately predicting this reality.

Canada-U.S.A. Comparisons

The portrayal of aggression in Canadian programming was of particular interest in this reserch project since most previous research, including Gerbner's work, has been restricted to U.S. programming. Unfortunately, comparisons between Canadian and U.S. programming are not necessarily straightforward. One approach is to compare production sources. Of the 109 programs in our sample, 24 were produced in Canada, 83 in the U.S.A., and two in other countries. We compared the depiction of aggression in the 24 Canadian-produced programs with that for the 83 U.S.-produced programs. However it is important to realize that because aggression is to some extent linked to program category, the differential production of programs in different categories may affect the results. For example, crime shows, which ranked highest of the program categories on physical aggression, comprised a larger proportion of the U.S.-produced sample (24.1%) than of the Canadian-produced sample (4.2%). Indeed, there is only one Canadian-produced crime show ("Sidestreet"). Similarly, animated programs made up 10.8% of the U.S. sample, but there were no Canadian-produced animated programs among those analyzed. It could be argued, therefore, that comparisons involving mean

production source data are biased, and only comparisons for program category data are legitimate. However, the fact that there exists only one Canadian-produced crime show and there were no Canadian-produced animated shows in the program sample is not happenstance, but is in itself information about the portrayal of aggression in Canadian programming.

With the above-noted caution in mind, a comparison of Canadian and U.S. programming according to production source is outlined in Table 2. In the first two columns of that table, the findings are given for all 24 Canadian-produced and 83 U.S.-produced programs. On the average, Canadian-produced programs contained proportionately fewer segments involving aggression (18.9% versus 22.7%), conflict (5.3% versus 7.3%), and harm to self (0.2% versus 2.4%) than U.S.-produced programs. Canadian-produced programs contained proportionately more segments containing argument (3.0% versus 1.5%) and no conflict (72.9% versus 68.5%). In terms of duration (proportion of program time), less time in Canadian-produced programs was spent depicting aggression (5.2% versus 7.6%) and build-up to aggression or suspense[2] (0.3% versus 3.4%), and thus less total time was concerned with aggression (5.5% versus 11.0%) than in U.S.-produced programs. There was also less time in the lead-ins to the Canadian-produced programs spent depicting aggression (5.7% versus 13.6%). Time spent depicting arguments was equal for Canadian- and U.S.-produced programs (1.6%). These findings indicate that on the average, Canadian-produced programs contained less aggressive content than U.S.-produced programs. Three of the findings deserve further comment.

Arguments were coded only if they were not superseded by conflict or aggression. That there were proportionately more Canadian- than U.S.-produced program segments involving argument but proportionately fewer segments

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[2]When timing the program, the coder timed separately "suspense" or "build-up to aggression". These terms refer to the technique wherein the viewer is waiting for an aggressive event to occur, for example, because an assassin is shown to be creeping up on an unsuspecting victim.

involving conflict and aggression indicates that there was more portrayal in Canadian-produced programs of mild forms of conflict. Further, the proportionate duration of arguments was the same for both Canadian- and U.S.-produced programs but there were proportionately more arguments in the programs produced in Canada. Therefore, the arguments portrayed on Canadian programs were shorter in duration, on the average, than those in U.S. programs. As stated earlier in this paper, conflict has been historically an important theme in dramatic fiction. It is therefore interesting that Canadian-produced programs contained as much if not more conflict than U.S. produced programs, but less violence.

The second point in Table 2 deserving general comment centres on the proportionate duration of build-up to aggression (suspense). This does not refer to general suspense in a program ("whodunnit"), but to a specific technique in which the audience is prepared for an aggressive event which almost invariably follows. For example, the audience may be allowed to see an assassin with a rifle who is stealthily creeping up on his or her unsuspecting victim. Members of the audience know that the assassin will act aggressively toward the victim and are kept on edge waiting for the precise moment of aggression. This technique increases the amount of time in a program devoted specifically to aggressive content without increasing the actual amount of time spent showing aggressive behaviour. And, as indicated in Table 2, this technique was used much less in Canadian-produced than in U.S.-produced programs. The figures for proportionate duration of actual aggression were 5.2% and 7.6% (Canadian-produced programs being slightly lower), but when build-up to aggression was added, the total figures were 5.5% and 11.0%, with the figure for Canadian-produced programs being half that for U.S.-produced programs.

The third point pertaining to the general comparison of Canadian- and U.S.-produced programs concerns the depiction of aggression in program lead-ins (sometimes called "teasers"). The lead-in is presumably intended to catch the audience's attention, interest viewers in the program about to begin, and keep them turned in to that program (and channel). Averaging across program categories, there was proportionately more than twice as much aggression in the lead-ins to U.S.- than to Canadian-produced programs (13.6% versus 5.7%). Looked at another way, the proportionate duration of aggression in the Canadian-produced lead-in was comparable to the proportionate duration of aggression and build-up to aggression in the actual program being advertised (5.7% and 5.5%, respectively), but the proportionate duration of aggression for U.S.-produced lead-ins was slightly greater than for their associated programs (13.6% and 11.0%, respectively). Aggression in Canadian-produced program lead-ins occurred only in game (proportionate duration 3.7%), music/variety/talk (8.4%), and documentary (35.2%) categories, and was clearly due largely to the high level of aggression in the lead-ins to the two Canadian-produced documentaries, "Time of the Jackals" and "The War Years".

Because of the problem discussed earlier in making production source comparisons across program categories, comparisons were also made separately for crime, situation comedy, adventure, and children's programs. The results are shown in Table 2.

The comparison for crime shows involves only the one Canadian-produced program, "Sidestreet", and thus must be considered with caution. (It is perhaps worth noting, however, that people who viewed the tape felt it was representative of "Sidestreet" programs.) The most interesting finding is that the Canadian-produced program contained more general conflict than the U.S.- produced crime programs (proportions of no-conflict episodes were 44.2%

and 61.0%, respectively), but that conflict was of a decidedly milder nature. Proportionately half as many Canadian- as U.S.-produced segments contained aggression (13.9% versus 27.8%), and the proportionate duration of aggression and build-up to aggression was only slightly more than half that for the U.S. sample (10.0% versus 18.6%). However, there were proportionately twice as many conflict segments (18.6% versus 9.3%) and more than ten times as many argument segments (23.3% versus 1.9%) in the Canadian- than in the U.S.-produced sample. The proportionate duration of arguments in the Canadian-produced sample was roughly six times that for the U.S. sample, whereas the proportionate frequency of argument episodes was ten times that for the U.S. sample. Again, it appears that since the production source difference for frequency was greater than that for duration, arguments in the Canadian sample tended to be shorter. Finally, there was no "teaser" aggression in Sidestreet, but 18.6% of the duration of lead-ins to U.S.-produced crime shows was spent portraying aggression.

As discussed earlier in this paper, the aggression depicted in crime shows tended to be physical in nature, in contrast to the verbal and psychological aggression portrayed in situation comedies. It is interesting therefore to note that whereas on the average Canadian-produced programs contained slightly less aggression than U.S.-produced programs, and the crime shows produced in Canada contained substantially less physical aggression than the crime shows produced in the U.S.A., the four Canadian-produced situation comedies (two versions of each of "King of Kensington" and "Excuse my French") contained slightly more verbal and/or psychological aggression than the 20 U.S.-produced situation comedies. Specifically, there were slightly more Canadian-produced than U.S.-produced aggressive segments (42.9% and 39.8%, respectively), conflict segments (17.9% and 14.2%), and again, more argument segments (7.1% and 2.8%), for a total of about 10% fewer no-conflict segments (32.1% and

43.1%). However, the proportionate duration of aggression and build-up to aggression was somewhat greater for the U.S.- than for the Canadian-produced sample (8.6% versus 2.3%), indicating that the verbal and/or psychological aggression in U.S.-produced situation comedies lasted somewhat longer. The proportionate duration of arguments was comparable (5.1 versus 4.4%) for the two production sources. There was slightly more aggression in the lead-ins to U.S.- than to Canadian-produced situation comedies, although in absolute terms the difference was not substantial.

There were three programs in the Adventure category produced in Canada ("The Beachcombers" and two versions of "Forest Rangers") and three produced in the United States ("Bionic Woman", "Six Million Dollar Man", and "World of Disney"). The Canadian-produced programs contained fewer aggressive segments than the U.S.-produced shows (12.7% and 17.0%, respectively), substantially more conflict segments (12.7% and 0.7%), only very slightly more argument segments (1.6% and 0), and, as was the case for situation comedies, about 10% fewer no-conflict segments. The pattern for proportionate duration of aggression and build-up to aggression discussed above for crime and situation comedy programs held true for adventures, with the Canadian figure being somewhat lower than the U.S. proportion (2.8% and 10.0%). The proportionate duration of arguments was low for both production sources but slightly higher for Canada than the U.S. (1.3% and 0.3%). There was no aggression in the Canadian-produced lead-ins to adventure shows; whereas 3.1% of the time in the U.S.-produced lead-ins was spent depicting aggression. These findings for the adventure category mirror those for the crime and situation comedy categories, and thus lend weight to the crime show findings which were problematic because there was only one Canadian-produced crime show. In all three categories, conflict occurred in programs produced in both Canada and the U.S.A., and there were actually fewer program segments containing no conflict produced in

Canada than in the U.S.A. However, there was consistently more of the less severe forms of conflict (argument and conflict) and less of the more severe form of conflict (aggression) in Canadian- produced programs than in the U.S.-produced programs.

The final production source comparison outlined in Table 2 is for children's (non-animated) programs. The sample contained three children's programs produced in Canada (two versions of "Mr. Dressup", and "Tiny Talent Time"), and eight produced in the United States (two versions of "Electric Company", "Land of the Lost", "Lost Saucer", two versions of "Mr. Rogers", "Sesame Street", and "Shazam/Isis"). Unlike the U.S.-produced children's programs, the Canadian-produced shows contained no aggression, conflict, argument, harm-to-self, or aggression in the lead-ins. In contrast, the U.S.-produced sample of children's shows seemed to be similar to the U.S.-produced adventures; for example, about the same proportion of program segments contained no conflict (84.8% of children's and 82.3% of adventures). The proportionate duration of aggression combined with build-up to aggression was also comparable (9.2% for U.S. children's shows, 10.0% for U.S. adventures). Interestingly, there was more aggression depicted in the lead-ins to children's programs (6.8%) than to adventure programs (3.1%) produced in the U.S.A. There were, however, proportionately fewer segments containing aggression in the U.S.-produced childen's shows (12.5%) than in the U.S.-produced adventures (17.0%), indicating that the incidents of aggression depicted in the U.S. children's shows lasted longer than those in the U.S. adventure shows. It is perhaps surprising that 9.2% of the time in U.S.-produced children's non-animated shows was spent depicting aggression, and that 14.8% of the program segments contained aggression. That is, although animated children's programs have been the focus of considerable criticism (and deservedly so; the analogous figures are 15.9% and 27.8%), one

hears little about other programming aimed at children. Keeping in mind that there were no Canadian-produced animated programs in our sample, our data indicate that Canadian-produced programming popular with children portrays relatively little aggression.

A second approach to comparing Canadian and U.S. content would be to compare the "media diets" available to Canadians via CBC (the Canadian government-owned network), CTV (the major Canadian commercial network) and other Canadian channels, and U.S. channels. We have not yet completed such an analysis, which requires that programs be categorized according to the channels on which they were shown, not just the ones from which they were taped (the same program is often aired on several different channels over a two-week period). A preliminary analysis based on taping channels did indicate that programs shown on CBC contained less aggression and slightly more conflict and argument than those shown on CTV and on the U.S. networks, and that CTV was comparable to the U.S. networks. Analyses at a more molar level also support the conclusion that CBC differs from CTV and the U.S. networks. When this sample was taped, CBC carried only two crime shows per week ("Sidestreet", the Canadian produced program discussed earlier, and "Police Story"), no animated programs, and no commercials on programming intended primarily for children. CTV carried a number of U.S.-produced crime programs, animated programs, and also had commercials on children's programs.

On the basis of analyses conducted to date it appears that programming produced in Canada contains less aggressive content than U.S. programming. More detailed analyses of the ways in which aggression and conflict are portrayed on television in the two countries and further research seem warranted. Particularly provocative were the suggestions in our findings that Canadian programming contains more conflict but less violence (i.e., less severe conflict) than U.S. programming, and that certain techniques associated

with the portrayal of aggression (portraying aggression in the program lead-ins and via what we termed build-up to aggression) are used more extensively in U.S. than in Canadian programs. Of course, the majority of television viewed by most Canadians is not produced in Canada. Although more clearly cause for concern in non-North American countries, such cultural imperialism also deserves research attention in Canada.

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